SAFETY DATA SHEET

1. Identification

Material name: EUCOBAR - 55 GAL DRUM
Material: 028 55

Recommended use and restriction on use

Recommended use: Coatings
Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information
EUCLID CHEMICAL COMPANY
19218 REDWOOD ROAD
CLEVELAND OH 44110
US

Contact person: EH&S Department
Telephone: 216-531-9222
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification
Not classified

Label Elements

Hazard Symbol: No symbol
Signal Word: No signal word.
Hazard Statement: Not applicable
Precautionary Statements
Not applicable

Hazard(s) not otherwise classified (HNOC):
None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)</th>
</tr>
</thead>
</table>
4. First-aid measures

**Ingestion:**
Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

**Inhalation:**
Move to fresh air.

**Skin Contact:**
Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.

**Eye contact:**
Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

**Most important symptoms/effects, acute and delayed**

**Symptoms:**
May cause skin and eye irritation.

**Indication of immediate medical attention and special treatment needed**

**Treatment:**
Get medical attention if symptoms occur.

5. Fire-fighting measures

**General Fire Hazards:**
No unusual fire or explosion hazards noted.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:**
Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical:**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:**
No data available.

**Special protective equipment for fire-fighters:**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures
Personal precautions, protective equipment and emergency procedures:
No data available.

Methods and material for containment and cleaning up:
Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Notification Procedures:
In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions:
Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling:
Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities:
Store away from incompatible materials. Store in original tightly closed container.

8. Exposure controls/personal protection

Control Parameters

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stearic acid - Respirable fraction.</td>
<td>TWA</td>
<td>3 mg/m3</td>
<td>US. ACGIH Threshold Limit Values (03 2017)</td>
</tr>
<tr>
<td>Stearic acid - Inhalable fraction.</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>US. ACGIH Threshold Limit Values (03 2017)</td>
</tr>
<tr>
<td>Morpholine</td>
<td>TWA</td>
<td>20 ppm</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td></td>
<td>PEL</td>
<td>20 ppm 70 mg/m3</td>
<td>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)</td>
</tr>
</tbody>
</table>

None of the components have assigned exposure limits.
<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stearic acid</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Stearic acid</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Morpholine</td>
<td>TWA</td>
<td>20 ppm</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Morpholine</td>
<td>TWA</td>
<td>20 ppm</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)</td>
</tr>
<tr>
<td>Morpholine</td>
<td>TWA</td>
<td>20 ppm  71 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Canada. Alberta OELs (Occupational Health &amp; Safety Code, Schedule 1, Table 2) (07 2009)</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>TWA</td>
<td>0.5 ppm  3.1 mg/m³</td>
<td>Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (09 2017)</td>
</tr>
</tbody>
</table>

**Appropriate Engineering Controls**

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

**Individual protection measures, such as personal protective equipment**

- **General information:** Use personal protective equipment as required.
- **Eye/face protection:** Wear goggles/face shield.
- **Skin Protection**
  - **Hand Protection:** Use suitable protective gloves if risk of skin contact.
  - **Other:** No data available.
- **Respiratory Protection:** In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
- **Hygiene measures:** Observe good industrial hygiene practices.

### 9. Physical and chemical properties

- **Appearance**
  - **Physical state:** liquid
  - **Form:** liquid
  - **Color:** Pink
  - **Odor:** Mild
Odor threshold: No data available.

pH: 7 - 9

Melting point/freezing point: No data available.

Initial boiling point and boiling range: No data available.

Flash Point: > 121 °C > 250 °F

Evaporation rate: Slower than Ether

Flammability (solid, gas): No

Upper/lower limit on flammability or explosive limits

- Flammability limit - upper (%): No data available.
- Flammability limit - lower (%): No data available.
- Explosive limit - upper (%): No data available.
- Explosive limit - lower (%): No data available.

Vapor pressure: No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and in the bottom of containers.

Relative density: 1

Solubility(ies)

- Solubility in water: Soluble
- Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: No data available.

Decomposition temperature: No data available.

Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No data available.

Conditions to avoid: Avoid heat or contamination.


Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact: Causes mild skin irritation.

Eye contact: Eye contact is possible and should be avoided.

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: Not classified for acute toxicity based on available data.

Specified substance(s):
Stearic acid  LD 50 (Rat): > 2,000 mg/kg
Morpholine  LD 50 (Rat): 1,900 mg/kg

Dermal
Product:  ATEmix: 296,559.91 mg/kg

Inhalation
Product:  Not classified for acute toxicity based on available data.

Repeated dose toxicity
Product:  No data available.

Skin Corrosion/Irritation
Product:  No data available.

Specified substance(s):
Stearic acid  in vivo (Rabbit): Not irritant  Experimental result, Key study
Morpholine  in vivo (Rabbit): Corrosive  Experimental result, Key study

Serious Eye Damage/Eye Irritation
**Product:**

**Specified substance(s):**

- Stearic acid

Rabbit, 27 - 72 hrs: Not irritating

Respiratory or Skin Sensitization

**Product:**

No data available.

Carcinogenicity

**Product:**

No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified


No carcinogenic components identified

Germ Cell Mutagenicity

**In vitro**

**Product:**

No data available.

**In vivo**

**Product:**

No data available.

Reproductive toxicity

**Product:**

No data available.

Specific Target Organ Toxicity - Single Exposure

**Product:**

No data available.

Specific Target Organ Toxicity - Repeated Exposure

**Product:**

No data available.

Aspiration Hazard

**Product:**

No data available.

Other effects:

No data available.
12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s): Morpholine
LC 50 (Bluegill (Lepomis macrochirus), 96 h): 350 mg/l Mortality

Aquatic Invertebrates
Product: No data available.

Specified substance(s): Morpholine
LC 50 (Water flea (Daphnia magna), 24 h): 100 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Specified substance(s): Stearic acid
Log Kow: 8.23
Morpholine

Log Kow: -0.86

Mobility in soil: No data available.

Other adverse effects: No data available.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG: Not Regulated

CFR / DOT: Not Regulated

IMDG: Not Regulated

15. Regulatory information

US Federal Regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morpholine</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Morpholine, 4-methyl</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Not classified
Not classified
SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morpholine</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Xanthylum</td>
<td></td>
</tr>
<tr>
<td>Morpholine, 4-methyl-</td>
<td>100 lbs.</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous Chemical

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Threshold Planning Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stearic acid</td>
<td>10000 lbs</td>
</tr>
<tr>
<td>Morpholine</td>
<td>10000 lbs</td>
</tr>
</tbody>
</table>

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act
No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances
No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable
**VOC:**
- Regulatory VOC (less water and exempt solvent) : 88 g/l
- VOC Method 310 : 0.19 %

**Inventory Status:**
- **Australia AICS:** One or more components in this product are not listed on or exempt from the Inventory.
- **Canada DSL Inventory List:** All components in this product are listed on or exempt from the Inventory.
- **EINECS, ELINCS or NLP:** One or more components in this product are not listed on or exempt from the Inventory.
- **Japan (ENCS) List:** One or more components in this product are not listed on or exempt from the Inventory.
- **China Inv. Existing Chemical Substances:** One or more components in this product are not listed on or exempt from the Inventory.
- **Korea Existing Chemicals Inv. (KECI):** One or more components in this product are not listed on or exempt from the Inventory.
- **Canada NDSL Inventory:** One or more components in this product are not listed on or exempt from the Inventory.
- **Philippines PICCS:** One or more components in this product are not listed on or exempt from the Inventory.
- **US TSCA Inventory:** All components in this product are listed on or exempt from the Inventory.
- **New Zealand Inventory of Chemicals:** One or more components in this product are not listed on or exempt from the Inventory.
- **Japan ISHL Listing:** One or more components in this product are not listed on or exempt from the Inventory.
- **Japan Pharmacopoeia Listing:** One or more components in this product are not listed on or exempt from the Inventory.
16. Other information, including date of preparation or last revision

<table>
<thead>
<tr>
<th>Revision Date:</th>
<th>08/30/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version #:</td>
<td>4.0</td>
</tr>
<tr>
<td>Further Information:</td>
<td>No data available.</td>
</tr>
<tr>
<td>Disclaimer:</td>
<td>For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.</td>
</tr>
</tbody>
</table>